The Baltic Sea Project

ESTIMATION OF AIR QUALITY USING BIOINDICATORS
Test: condition of fir trees, lichens, tar spot fungus – protocol to be sent to co-ordinator

Date: 27.05.2010
School: Tallinn English College
Address: Estonia pst 10, Estonia
Teacher: Kaisa-Helena Luht
Class/Group: G1
Place, where the test is taken: Tallinn, Nõmme
Natural conditions and topographical situation (coastal, inland, mountain, plain): coastal, plain
Possible local source of pollution: transport, cars

I Fir trees

1, 2, 3. Investigating forest damage in fir trees

Name of the tree (fir, spruce or pine): Fir

Tree no.	1	2	3	4	5	6	7	8	9	10	Mean value
1. Needle loss class (1, 2, 3)	1	1	1	1	1	1	1	1	1	1	1
2. No. generations of needles	5	5	6	4	3	5	4	6	6	4	4,8
3. Occurrence of fear shoots (1, 2, 3)	3	3	2	3	2	3	3	2	2	3	2,6

II Lichen

1. Counting the number of kinds of different types of lichen

Name of the tree (English or Latin name): Aspen

Tree no.	No. kinds of crustose lichen	No. kinds of foliose lichen	No. kinds of fructicose lichen	Zone
1	1	1	-	3
2	1	2	-	3
3	1	2	-	3
4	1	1	-	3
5	1	2	-	3
			Mean value zone:	3

2. Determining the degree of coverage of the lichen

Name of the tree (English or Latin name): Aspen

Tree no.	Coverage of crustose lichen in %	Coverage of foliose lichen in %	Coverage of fructicose lichen in %	Total coverage of the whole overhead film in %
1	80	82	-	81
2	49	75	-	62
3	50	63	-	57
4	51	50	-	51
5	69	79	-	74
			Mean value :	65
			Zone :	4